

ART. IX.—*On Some New Species of Victorian Mollusca.*

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(With Plate VIII.).

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***Drillia gabrieli*, sp. nov.**

Shell, turreted, elongate fusiform, consisting of a smooth convex embryo of about one and a half whorls, succeeded by about six nodose or imperfectly costate whorls.

Apex obtuse, owing to the convexity of the embryonic whorls. Spire-whorls subangulate medially or slightly below the middle, and somewhat overlapping at the suture owing to the presence of a more or less developed narrow sutural band.

The earlier spire-whorls are occasionally somewhat obliquely costate, but more frequently a medial tumidity only is noticeable, in either case the costæ or tumidities tend to become obsolete towards the body-whorl, which is sometimes almost smooth. Fine and somewhat irregular lines of growth mark the shell parallel to the costation or nodulation, and transverse to this are fairly strong spiral threads of two or three degrees of fineness, occasionally slightly irregular or undulating where crossed by the lines of growth.

Aperture narrow-ovate, with a broad deep sinus just above the shoulder. Anterior canal rather broad and short; columella white or whitish brown, and only slightly twisted; posterior end of aperture furnished just below the suture with a somewhat strong tubercle. Outer lip thin and with a sharp edge, smooth within.

Colour, dirty-white, whitish-brown, to dark brown, usually brown.

Dimensions.—Length of type, 16 mm.; breadth, 5 mm.; length of aperture, 6 mm.; breadth of aperture, 2 mm. These dimensions also well represent the usual size of the species, though some examples are a little smaller, having a length of 16 mm. by a breadth of 4 mm.

Locality.—Dredged alive by Mr. C. J. Gabriel from about five fathoms, on a muddy bottom, off Phillip Island, Western Port.

Observations.—This new species is closely allied to some of our undescribed fossil forms of Eocene and Miocene age, but can be readily distinguished upon close examination of the material hitherto examined.

Drillia howitti, sp. nov.

Shell thick and strong, elongately turreted, with a spire about two and a half times the length of the aperture, and consisting of a smooth convex translucent embryo of about one and a half whorls, succeeded by about seven, gradually increasing nodose whorls.

Apex obtuse, whorls very slightly convex, with a well-marked suture, and a broad flat or very slightly convex area below the suture occupying a little less than half the breadth of the whorls. Below the sutural band the whorls are more markedly convex owing to the presence of smooth oblique nodosities, which number from about ten to thirteen or fourteen to the whorl, usually with thirteen on the penultimate whorl.

The shell is otherwise smooth showing the lines of growth only very faintly.

Aperture narrow-ovate, with a broad shallow sinus fully occupying the flat area below the suture; the breadth of the sinus being somewhat detracted from by the presence of a large and prominent tubercle on the columellar side. Columella white and slightly twisted. Anterior canal very short, but relatively rather broad. Outer lip thin at the margin and smooth within.

Colour, white, creamy, or light brown.

Dimensions.—Length, 13 mm.; breadth, 4 mm.; length of aperture, 5 mm.; breadth of aperture, 2 mm.

Locality.—Gippsland coast.

Observations.—The name is given to the species as a compliment to Mr. A. W. Howitt, F.G.S., who has added so much to our scientific knowledge of the Gippsland area. This species is quite distinct from any described forms with which we are acquainted, but in many respects it is closely allied to some undescribed species from Victorian deposits of Miocene age.

Mangilia flaccida, sp. nov.

Shell narrowly elongate, with a rather acute apex in unworn specimens, but most of the adult specimens hitherto examined appear blunt and obtuse on account of apical erosion.

Embryonic whorls about two, smooth and shining, and slightly convex; the succeeding whorls number about four or five, and are strongly costate.

Spire whorls are subangulate a little below the suture, giving to the latter the appearance of being somewhat impressed. Each whorl bears from ten to twelve strong costæ, usually the former number; the costæ are slightly oblique, are usually narrower than the interspaces between them and extend of a uniform breadth from the anterior suture to the posterior angulation, thence to the posterior suture tapering slightly, and forwardly directed to a slight extent. On the anterior lower half of the body-whorl the costæ are backwardly arched, and thin out towards the columella. The costæ and interspaces are both crossed transversely by fairly strong and intermediate fine series of spiral threads, the strong and prominent threads numbering from three to six to a whorl, with several fine threadlets between them.

In young, and in well preserved adult shells, the coarser spiral threads where they cross the costæ, cause the latter to have a regular beaded or granulated appearance, but in some adult specimens there appears to be a tendency for this type of ornament to become indistinct or obsolete towards the body-whorl. Parallel to the costæ fine striæ-like lines of growth are discernible under a lens. Aperture ovate, with a somewhat narrow but well defined sinus posteriorly just below the suture, and with a short broad and shallow anterior canal.

Columella smooth and slightly twisted. The outer lip in adult specimens has a thin edge from the sinus to the anterior lower margin of canal, with a well-marked varicose thickening behind, extending from the anterior canal up to and then round the sinus to the suture, where it thins out in a pad-like form on the inner lip. Outer lip somewhat effuse anteriorly.

Colour white to creamy, with a pale or faded violet-brown broad band on the anterior slope of the body-whorl, and a faint

narrow band near the suture, and usually just discernible above the anterior suture of the penultimate whorl; occasionally darker spots of a brownish colour are to be seen on the costæ of the body-whorl at or a little below the centre of the whorl.

Dimensions.—Type specimen: Length, 9 mm.; breadth, 3·5 mm.; length of aperture, 4 mm.; breadth of aperture, 1·5 mm. Larger examples: Length, 12·5 mm.; breadth, 5 mm. Immature example: Length, 5·5 mm.; breadth, 2·5 mm.

Locality.—San Remo, Western Port.

Observations.—This is probably the shell that has been regarded as *Mangilia pura*, Reeve, by some South Australian and Tasmanian conchologists, this name appearing in Mr. Adcock's "Hand List of South Australian Species," p. 5, and we have received it under this name from Tasmania. We have, however, been unable to identify any of our shells with Reeve's above species (said to be synonymous with a Mediterranean shell), though the form at present under consideration might possibly be regarded as the closest related. After consideration of Tenison Woods' descriptions we have failed in making an identification, and have therefore been constrained to regard it as a new species.

Cithara cognata, n. sp.

Shell narrowly fusiform, somewhat solid, of six and a half whorls, one and a half smooth nuclear whorls, the four succeeding whorls being longitudinally plicate, about eleven plicæ on the penultimate whorl, following at somewhat irregular intervals, reflected, and more developed at the suture, and tending to become obsolete on the body whorl. Densely spirally grooved, grooves continuing over the plicæ, and crossed transversely by fine striæ and lines of growth, these causing an irregular undulation in the groove, most noticeable on the body whorl. Suture impressed. Aperture narrowly lanceolate. Sinus somewhat broad, well defined. Outer lip at the edge acute, thickened, almost forming a varix, interior smooth. Columella smooth.

Of a pale brown colour, sometimes there are about six white spiral lines on the outer lip, which gradually disappear. Distinctly, irregularly, spotted, with very dark brown,

immediately below the suture on the body whorl; the spots when ascending the spire becoming gradually less distinct.

Dimensions of Type.—Length, 16 mm.; breadth, 6 mm.; length of aperture, 9 mm.; breadth of aperture, about 2 mm. Other specimens range in length from 12 mm. to 19 mm.

Locality.—Dredged alive five fathoms, off Phillip Island, Western Port, by C. J. Gabriel.

Observations.—Our most nearly related species is *Cithara compta*, Adams and Angas, but it may be readily distinguished from that species by its much narrower form, more lengthy spire, and by its only having about half the number of plicæ on the penultimate whorl. We have named it *C. cognata* because of this near relationship.

***Clathurella sexdentata*, n. sp.**

Shell solid, narrowly fusiform, of six whorls, one and a half smooth nuclear whorls, the first half turn being somewhat obliquely enrolled to the general axis. Longitudinally plicate, body whorl bearing twelve to fourteen well defined plicæ, which terminate just below the suture; this is well impressed. About sixteen thread-like liræ encircling the body whorl, strongly developed between the plicæ but barely discernible upon them. Aperture narrowly ovate. Sinus well defined, and in juxtaposition to the suture. Outer lip varicosely thickened, with about six elongated denticles within. Columella smooth. Anterior channel open, slightly everted.

White, the liræ being somewhat more opaque than the remainder of the shell.

Dimensions of Type.—Length, 6 mm.; breadth, 2.25 mm.; length of aperture, 2 mm.; breadth, 1 mm. Larger examples attain to a length of 7 mm.

Locality.—Sorrento beach, Port Phillip (Gatliff).

Observations.—In habit and size nearly related to *C. modesta*, Angas, but the sculpture is finer and differs in character.

***Mitromorpha flindersi*, n. sp.**

Shell robustly fusiform, of five and a half whorls, one and a half smooth nuclear whorls, the remainder densely spirally lirate,

lire numbering from five to seven on the spire whorls, and about twenty on the body whorl, and being under the lens transversely striate.

Aperture narrowly lanceolate. Outer lip acute, smooth within. Columella slightly arcuate, bearing two oblique plaits about the centre.

White, there is occasionally an interrupted light brown band on the shoulder of the body whorl, and sometimes the encircling lire are finely dotted with light yellowish-brown; extreme apex usually tinted with purplish-brown.

Dimensions of Type.—Length, 6 mm.; width, 3 mm.; length of aperture, 3 mm.; width, about 1 mm.

Locality.—Flinders beach, Western Port (Gatliff).

Observations.—This shell is nearly allied to *M. volva*, Sowerby, from Port Elizabeth, "Marine Shells of South Africa," page 7, Plate 1, Fig. 16, and in South Australia, has been identified as such; our species is more robust in form, and the lire are about twice as numerous as those indicated by Sowerby's figure. This is the first time the genus has been recorded as being on our coast.

Liotia hedleyi, n. sp.

Shell discoid, whorls three and a half, the body whorl is angulated by the uppermost of three prominent spiral keels, which are crossed by about twenty well-defined transverse ridges, causing distinct serration of the keel, from an apical aspect; these ridges are directed obliquely backwards, only slightly noticeable between the suture and first keel, more distinct between that and the second, and continuing so to the umbilical keel, and the interstices are under the lens finely striated, striae running parallel to the ridges; these fine striae cause interference with the light, giving rise to iridescence when viewed obliquely.

Aperture circular and continuous, lip broadly margined, the margin being sculptured in a manner similar to the other portion of the body whorl.

Widely umbilicated to the spire, umbilicus carinated, area between the carination and keel concave.

Of a uniform cream colour, slightly tinted with brown.

Operculum concentric, of uniform thickness, concave and shelly on the exterior, which is faintly granular. Horny on its inner face.

Dimensions.—Diameter, 4 mm.; altitude, 2 mm.; inside diameter of aperture about 1 mm.

Locality.—Flinders beach, Western Port (Gatliff).

Observations.—In general habit approaching to *L. discoidea*, Reeve, but in that species the transverse ridges are only present on the upper portion of the body whorl, and our shell does not attain to one-fourth the size. We have much pleasure in naming the species after our friend Mr. Charles Hedley, Conchologist to the Australian Museum, Sydney, who has done such excellent work in this branch of science.
